CLAIMS:

1. Suspension that can be used to generate a current of electrons, which suspension comprises a polypeptide, wherein the polypeptide is entrapped in a hollow particle.

2. The suspension according to claim 1, comprising more then one hollow particle.

3. The suspension according to claim 2, wherein the density of the hollow particles in the suspension is such that the majority of the hollow particles is in close contact to each other.

4. The suspension according to any of claims 1-3, wherein the hollow particle is a vesicle.

5. The suspension according to any of claims 1-4, wherein the vesicle is a polymersome.

6. The suspension according to any of claims 1-5, wherein the shell of the hollow particle is conductive.

7. The suspension according to any of claims 1-6, wherein the hollow particle comprises conductive polymer.

8. The suspension according to any of claims 1-7, wherein the hollow particle comprises a block-copolymer.

9. The suspension according to claim 8, wherein the block-copolymer comprises a hydrophobic polystyrene block and a hydrophilic polyisocyanopeptide.

10. The suspension according to claim 8 or 9, wherein the block-copolymer comprises polystyrene-*b*-poly(L-isocyanoalanine(2-thiophen-3-yl-ethyl)amide) (PS-PIAT).

11. The suspension according to claim 8, wherein side groups present on the block-copolymer are polymerized.

12. The suspension according to claim 10, wherein the thiophene side groups present in the side chain of polystyrene-*b*-poly(L-isocyanoalanine(2-thiophen-3-yl-ethyl)amide) are polymerized.

13. The suspension according to any of claims 1-12, wherein the polypeptide is linked to the inner side of the hollow particle.

14. The suspension according to any of claims 1-13, wherein the polypeptide is capable of participating in a chemical reaction or is capable in participating in the formation of a molecular structure that facilitates such reaction.

15. The suspension according to claim 14, wherein the chemical reaction is a redox reaction.

16. The suspension according to claim 14, wherein the chemical reaction is an oxidation.

17. The suspension according to any of claims 1-16, wherein the polypeptide is an enzyme.

18. The suspension according to claim 17, wherein the hollow particle is permeable to a substrate of the enzyme.

19. The suspension according to claim 16 or 17, wherein the enzyme is glucose oxidase.

20. The suspension according to claim 19, wherein the hollow particle is permeable to a substrate of glucose oxidase.

21. The suspension according to claim 20, wherein the hollow particle is permeable to glucose.

22. The suspension according to any of claims 1-21, wherein the hollow particle is embedded in a gel-like structure.

23. The suspension according to any of claims 1-22, wherein the hollow particle is embedded in a glucose solution.

24. The suspension according to any of claims 1-23, comprising a matrix, for example a linear conductive polymer, to contact the hollow particle.

25. The suspension according to any of claims 2-24, comprising a matrix, for example a linear conductive polymer, to cross-link at least one hollow particle to another hollow particle.

26. The suspension according to any of claims 1-25, comprising electron carriers such as ferrocene derivatives and viologen derivatives.

27. Use of the suspension according to any of claims 1-26, for the production of a battery.

28. Use of the suspension according to any of claims 1-26, for the production of a nano-battery for the use in combination with a microchip.

29. Battery using the suspension according to any of claims 1-26.

30. A fuel cell, comprising: an anode compartment including an anode; a cathode compartment including a cathode; and disposed within said anode compartment, within said cathode compartment, or between said anode compartment and said cathode compartment, the suspension according to any of the claims 1-26.

31. Device for detection of a solute using the suspension according one of the claims 1-26.

32. Device according claim 31, wherein the solute is glucose.

33. A Method of producing electrical power, comprising the use of the suspension according to any of claims 1-26.

34. A method for preparing the suspension according to any of claims 1-26, comprising the steps of:

(a) making an aqueous solution of bis(2,2'-bipyridine)ruthenium(II)bis(pyrazolyl);

(b) injecting a solution containing polystyrene-*b*-poly(L-isocyanoalanine(2-thiophen-3-yl-ethyl)amide) in THF into the solution made in step (a).

35. The method according to claim 34, that furthermore comprises:

(c) placing the dispersion made in step (b) at 60 °C;

(d) cooling the dispersion to room temperature, and

(e) filter the dispersion of step (d) using a filter with a cutoff of 100 kDa.